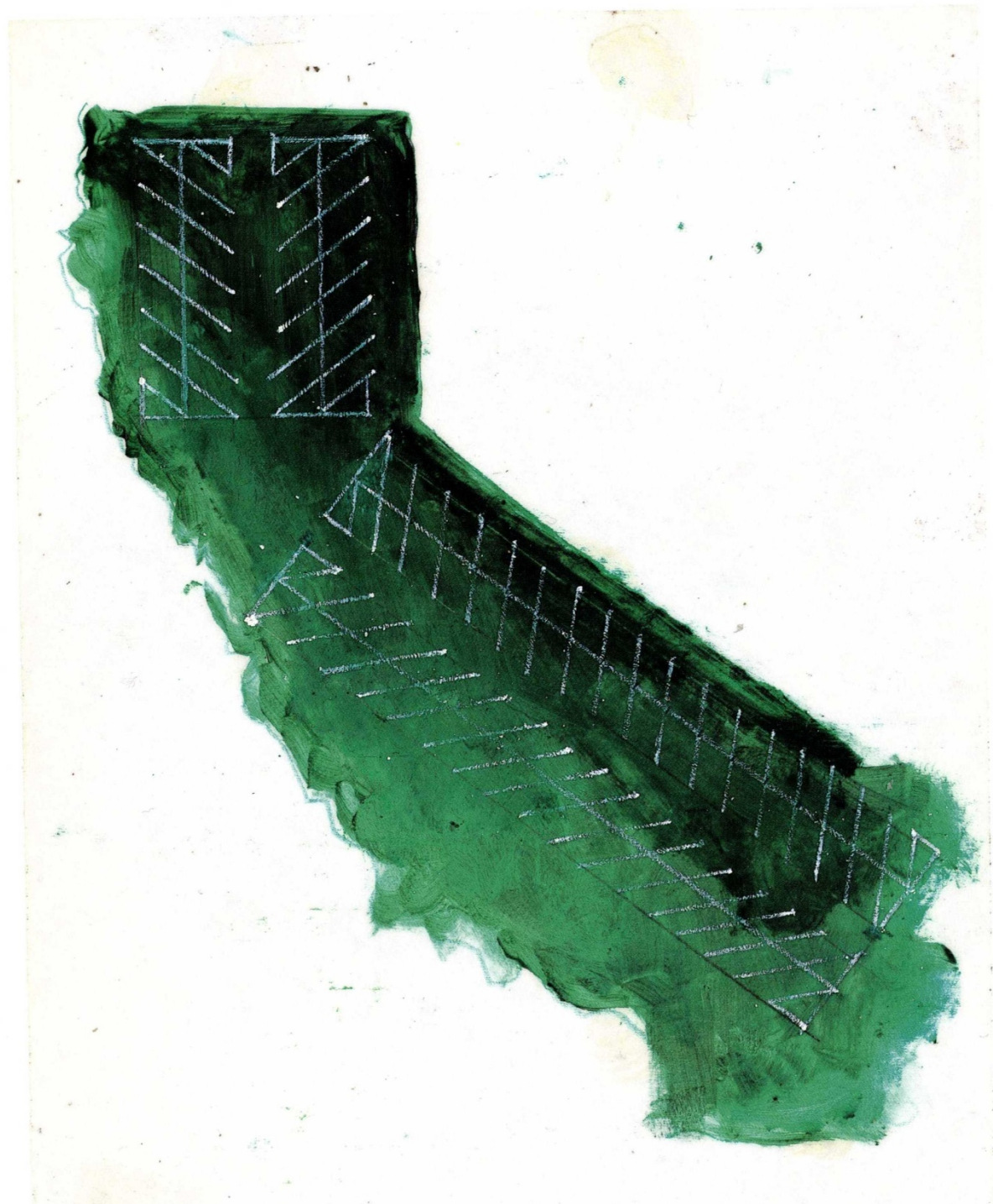




# The High Cost of Free Parking

DONALD SHOUP















# Parking Standards

Edited by  
Michael Davidson and Fay Dolnick

APA

American Planning Association

PAS

Planning Advisory Service  
Report Number 510/511



# Survey of parking requirements for 660 land uses in 2002

## a

abattoir (*see* slaughterhouse)  
 accessory dwelling unit  
 administrative office (*see* office uses)  
 adult use  
 adult use, adult arcade  
 adult use, adult cabaret  
 adult use, adult motion picture theater  
 adult use, adult theater  
 adult use, book store  
 adult use, entertainment facility  
 adult use, massage parlor (*see also* massage establishment)  
 adult use, sex novelty shop  
 advertising agency (*see also* office use)  
 agricultural use, unless otherwise specified (*see also* farm uses)  
 agricultural processing plant (*see also* industrial uses)  
 agricultural-related industry (*see also* agricultural use, unless otherwise specified)  
 agricultural sales and service use (*see also* farm supply store; feed store)  
 aircraft charter service  
 airport (*see also* airport terminal)  
 airport hangar  
 airport, local/private use  
 airport terminal (*see also* airport; transportation terminal)  
 ambulance service  
 amphitheater (*see also* stadium)  
 amusement enterprise (*see also* recreation facility uses)  
 amusement enterprise, indoor  
 amusement enterprise, outdoor  
 amusement park  
 amusement park, children's  
 amusement park, water  
 ancillary use (*see* accessory use)  
 animal boarding facility  
 animal breeder establishment  
 animal grooming salon  
 animal hospital  
 animal sales establishment (*see* pet shop)  
 animal shelter  
 animal training facility  
 antique shop (*see also* second-hand store)  
 apartment (*see* dwelling, apartment uses)  
 apartment hotel (*see* extended-stay hotel)  
 apparel store (*see* clothing store)  
 appliance and equipment repair establishment (*see also* equipment uses)

## ALL USES

appliance sales establishment  
 aquaculture use  
 aquarium  
 arboretum (*see also* botanical gardens; community garden)  
 arcade, amusement (*see also* amusement enterprise uses)  
 archery range (*see also* rifle range; shooting range)  
 arena (*see* stadium)  
 armory  
 art gallery (*see also* cultural uses)  
 art school (*see* educational facilities, school for the arts)  
 art supplies store  
 artisan workshop (*see also* live-work studio)  
 artist studio (*see also* artisan workshop; live-work studio)  
 asphalt manufacturing facility (*see also* industrial use, heavy)  
 assembly hall (*see also* auditorium; civic center)  
 assisted living (*see* elderly housing, assisted living)  
 asylum (*see* mental health facility)  
 athletic field (*see also* ball field; grandstands; recreation facility uses)  
 auction, automobile  
 auction house  
 auditorium (*see also* assembly hall; civic center)  
 automated teller machine (ATM)  
 automated teller machine (ATM), exterior, on bank property  
 automobile convenience store (*see* gas station, mini-mart)  
 automobile dealership (*see also* motor vehicle sales establishment)  
 automobile graveyard (*see* automobile salvage yard; junk yard)  
 automobile impound facility (*see also* towing service)  
 automobile laundry (*see* car wash uses)  
 automobile maintenance, quick service establishment (*see also* automobile repair service establishment)  
 automobile mall (*see* automobile dealership uses)  
 automobile parts store  
 automobile rental establishment (*see also* motor vehicle rental establishment)  
 automobile repair service establishment (*see also* gas station; motor vehicle repair service establishment; tire store and

service establishment)  
 automobile salvage yard (*see also* junk yard)  
 automobile service station (*see also* gas station)

## b

bait shop (*see also* retail use, unless otherwise specified)  
 bakery  
 bakery, wholesale  
 ball field (*see also* athletic field; grandstands; recreation facility uses)  
 ballroom (*see also* banquet hall; dance hall)  
 bank (*see also* accessory banking; automated teller machine (ATM); credit union)  
 bank, drive-thru only (*see also* drive-thru use, unless otherwise specified)  
 bank with drive-thru (*see also* drive-thru use, unless otherwise specified)  
 bank, without drive-thru  
 banquet hall (*see also* ballroom; dining room; meeting hall)  
 bar (*see also* beer garden; bottle club; brew pub; night club)  
 barber shop (*see also* beauty shop; personal services establishment)  
 baseball field (*see* ballfield)  
 basketball court  
 batch plant (*see* concrete production plant)  
 bathhouse (*see also* health spa; sauna bath)  
 batting cage facility  
 beach, commercial  
 beach, community  
 beauty shop (*see also* barber shop; personal services establishment)  
 beauty school (*see also* educational facility; trade school)  
 bed and breakfast home  
 bed and breakfast inn (*see also* tourist home)  
 beer garden (*see also* outdoor seating area)  
 bicycle rental and repair shop  
 bicycle repair shop  
 bicycle sales shop  
 billiard hall (*see* pool hall)  
 big box retail establishment (*see also* department store; shopping center uses)  
 bingo hall  
 blood donor center  
 blueprinting shop (*see also* copy shop; printing and publishing facility)  
 boarding house (*see also* lodging house; rooming house)



# a

**abattoir** (see *slaughterhouse*)

**accessory dwelling unit**

- 1 additional space, on the same zone lot (*Greensboro, N.C., pop. 223,891*)
- ✓ • 1 per attached accessory dwelling unit, in addition to other required spaces (*Washoe County, Nev., pop. 339,486*)
- 1 per bedroom (*Reno, Nev., pop. 180,480*)
- 1 space (*Encinitas, Calif., pop. 58,014*)
- 1 space per unit (*Palo Alto, Calif., pop. 58,598*)
- 2 spaces per unit; such space must have convenient access to a street (*Smithfield, Va., pop. 6,324*)



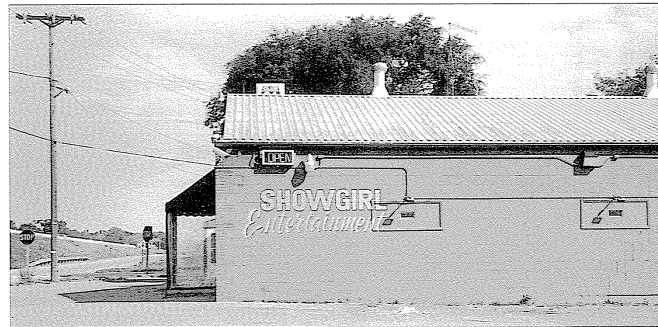
Bicycle Parking Standard: 0.5 per 1,000; 1 per 20 seats (*Tigard, Ore., pop. 41,223*)

**adult use adult arcade**

- 1 parking space shall be provided for every 2 occupants per the allowable occupant load as established by the city's building official or fire marshal, whichever standard is greater. In addition, 1 parking space shall be provided for each employee or independent contractor on the maximum shift. (*Santa Clarita, Calif., pop. 151,088*)

**adult use, adult cabaret**

- 1 parking space shall be provided for every 2 occupants per the allowable occupant load as established by the city's building official or fire marshal, whichever standard is greater. In addition, 1 parking space shall be provided for each employee or independent contractor on the maximum shift. (*Santa Clarita, Calif., pop. 151,088*)
- 1 space per 25 square feet of gross floor area (*Garden Grove, Calif., pop. 165,196*)



adult use

**administrative office** (see *office uses*)

**adult use**

- 0.3 per seat, plus 3.3 per 1,000 square feet of gross floor area (*Tampa, Fla., pop. 303,447*)
- 1 per 60 square feet (*Henderson, Nev., 175,381*)
- 10 per 1,000 square feet (*Hickory, N.C., pop. 37,222*)
- 12 per 1,000 square feet (*St. Mary's County, Md., pop. 86,211*)
- Minimum: 1 per 500 square feet above first 2,400 square feet
- Maximum: 1 per 150 square feet (*Pittsburgh, Pa., pop. 334,563*)
- Minimum: 1 per 250 square feet of gross floor area
- Maximum: 1 per 200 square feet of gross floor area (*Glenville, N.Y., pop. 28,183*)

- 1 per 200 square feet (*Fort Wayne, Ind., pop. 205,727*)
- 10 per 1,000 square feet, but not less than 15 (*Clark County, Nev., pop. 1,375,365*)

**adult use, adult motion picture theater**

- 1 off-street parking space for each 10 seats or equivalent (*San Bruno, Calif., pop. 40,165*)
- 1 parking space shall be provided for every 2 occupants per the allowable occupant load as established by the city's building official or fire marshal, whichever standard is greater. In addition, 1 parking space shall be provided for each employee or independent contractor on the maximum shift. (*Santa Clarita, Calif., pop. 151,088*)
- 1 space for each 8 fixed seats or 1 space for each 100 square feet of spectator assembly area not containing fixed seats (*Seattle, Wash., pop. 563,374*)



# A parking requirement sampler

Barber shop	2 spaces per barber
Beauty shop	3 spaces per beautician
Nunnery	1 space per 10 nuns
Rectory	3 spaces per 4 clergymen
Sex novelty shop	3 spaces per 1,000 square feet
Gas station	1.5 spaces per fuel nozzle
Swimming pool	1 space per 2,500 gallons
Mausoleum	10 spaces per maximum number of interments in a one-hour period

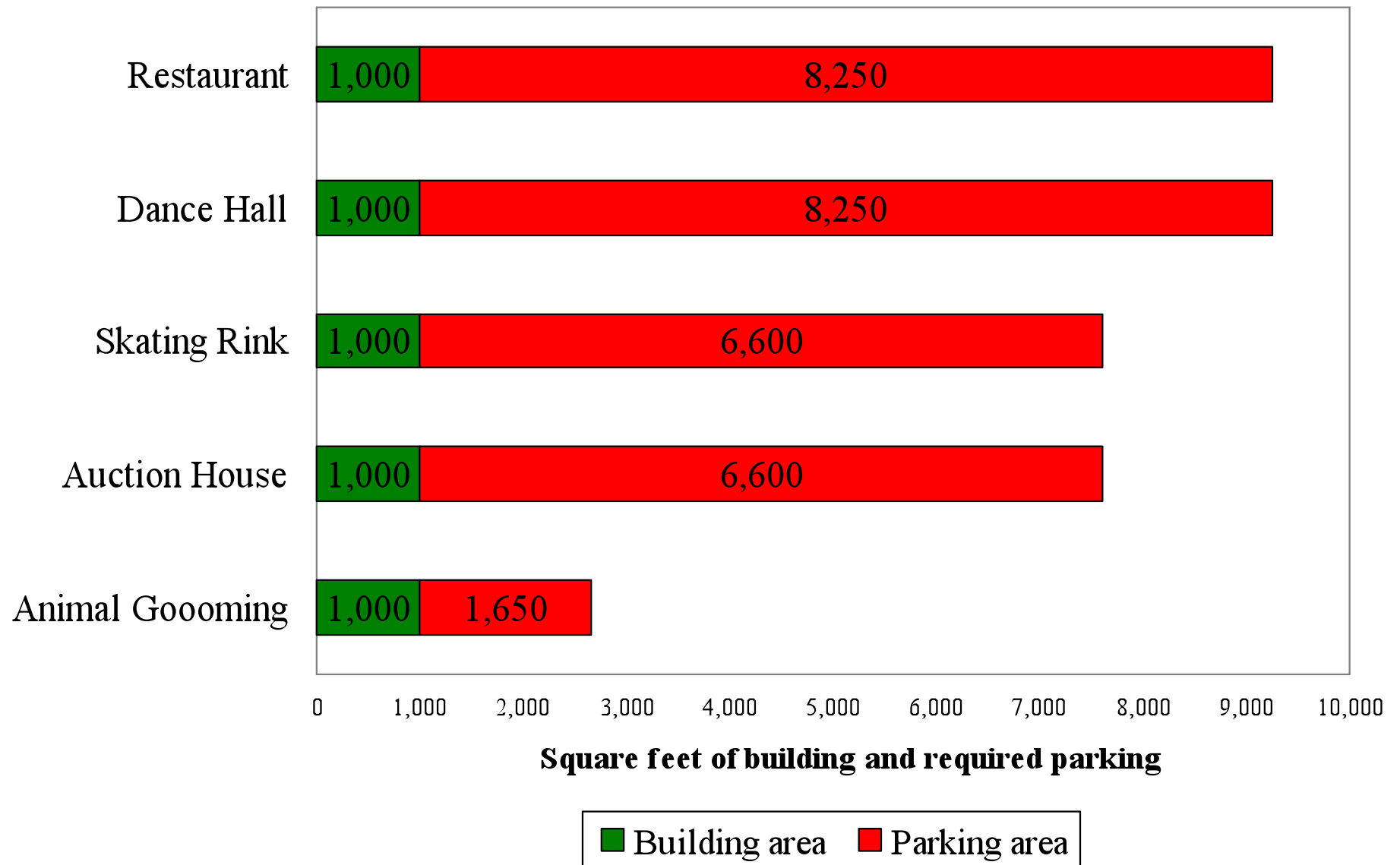


# Two Mistakes in Parking Policy

1. Keep curb parking free or cheap
2. Require lots of off-street parking



## San José's minimum parking requirements

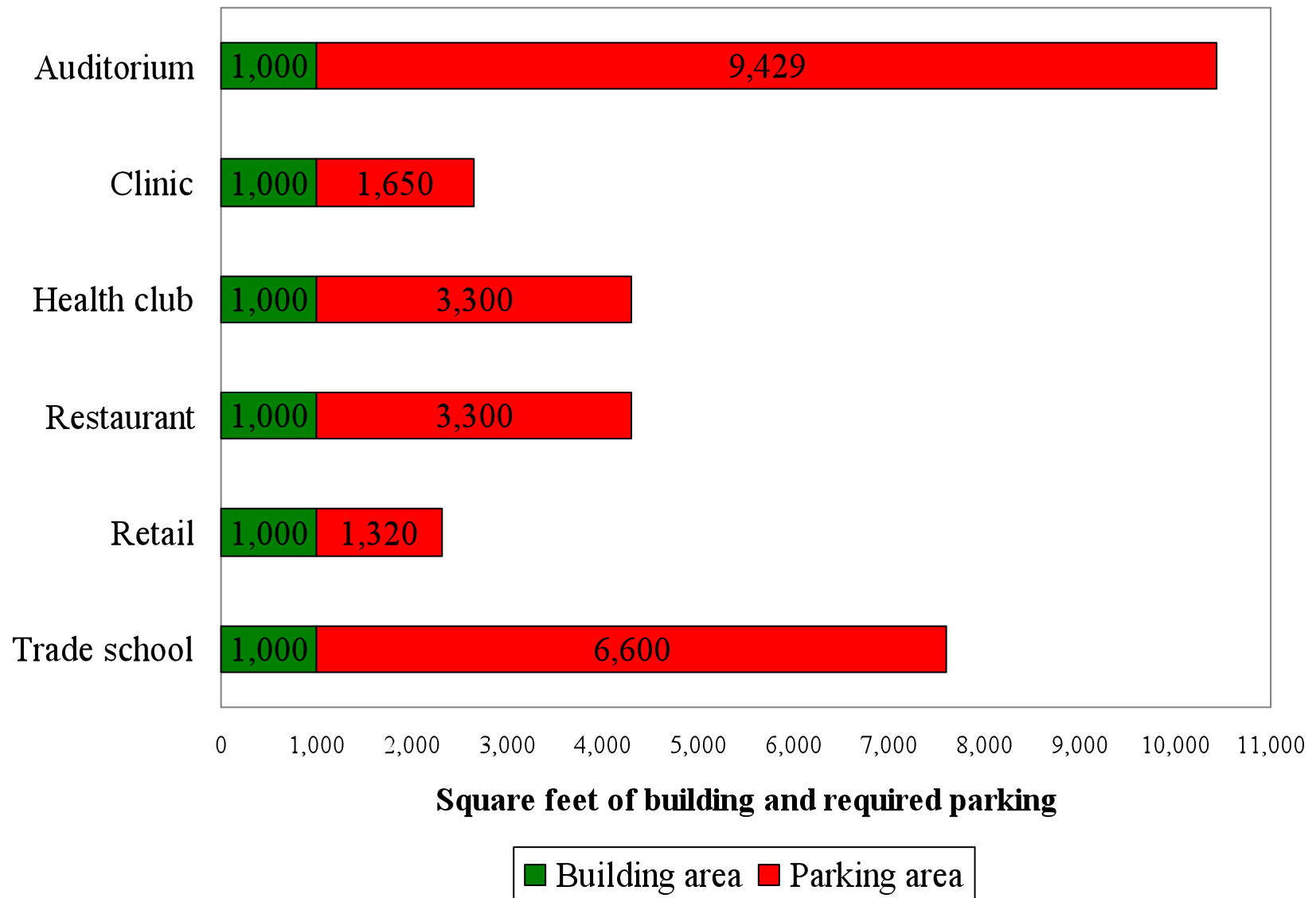


**Table 20-190**  
**Parking Spaces Required by Land Use**

Use	Parking Required	Applicable Sections
Community centers	1 per 4 fixed seats, or 1 per 6 linear feet of seating, plus 1 per 200 square feet of area without seating but designed for meeting or assembly by guests, plus 1 per 500 sq. ft. of outdoor area developed for recreational purposes	
Utility facilities, excluding corporation yards, storage or repair yards and warehouses	1 per 1.5 employees, plus 1 per company vehicle	
<b>Recycling Uses</b>		
Processing facility	1 per employee of the largest shift, plus 1 per facility vehicle	
Transfer facility	1 per employee of the largest shift, plus 1 per facility vehicle	
Small collection facility	1 per attendant	
<b>Residential</b>		
Emergency residential shelter	1 per 4 beds, 1 per 250 square feet of area which is used for office purposes	Section 20.90.220(C)
Guesthouse	1 per guest room, plus 1 per each employee	
Live/Work	No additional parking required above what is required for commercial use parking	



## Los Angeles minimum parking requirements



# A Great Planning Disaster

- Skew travel choices toward cars
- Distort urban form
- Degrade urban design
- Raise housing costs
- Impede reuse of older buildings
- Limit homeownership
- Damage the urban economy
- Harm the environment



# Three Reforms in Parking Policy

1. Charge the right price for curb parking.

The lowest price that will leave one or two vacant spaces on each block—performance-based pricing

2. Return the meter revenue to the neighborhoods that generate it.

Revenue return will make performance-based prices for curb parking politically popular.

3. Reduce or remove off-street parking requirements. Do not require additional parking when a building's use changes.

Freedom from parking requirements will allow higher density and new uses for old buildings.

# 1. Performance-based Parking Prices

Performance-based prices adjust over time to maintain a few vacant spaces.

The goal is to keep about 85 percent of the parking spaces occupied all the time.

About one curb space is vacant on each side of each block so that everyone can see that convenient parking is available everywhere.



## Examples of pricing options

As the use of demand-responsive pricing for both on- and off-street parking is the primary tool for reducing congestion, the pricing models the SFMTA intends to test and evaluate merit special illustration. The following tables use hypothetical values to illustrate these pricing structures.

### Vary price by time of day

Time when parked	Price per hour
8am-10am	\$3.50
10am-4pm	\$2.00
4pm-7pm	\$3.00
7pm-9pm	\$1.00

### Vary price by length of stay

Hour of parking	Price for that hour
1 <sup>st</sup>	\$1.00
2 <sup>nd</sup>	\$1.50
3 <sup>rd</sup>	\$2.00
4 <sup>th</sup> (and successive hours)	\$2.50

### **Before SFpark**



**Block A - Central Business District Location - 0 Open Spots**



**Block B - Nearby Location - 3 Open Spots**

### **After SFpark**



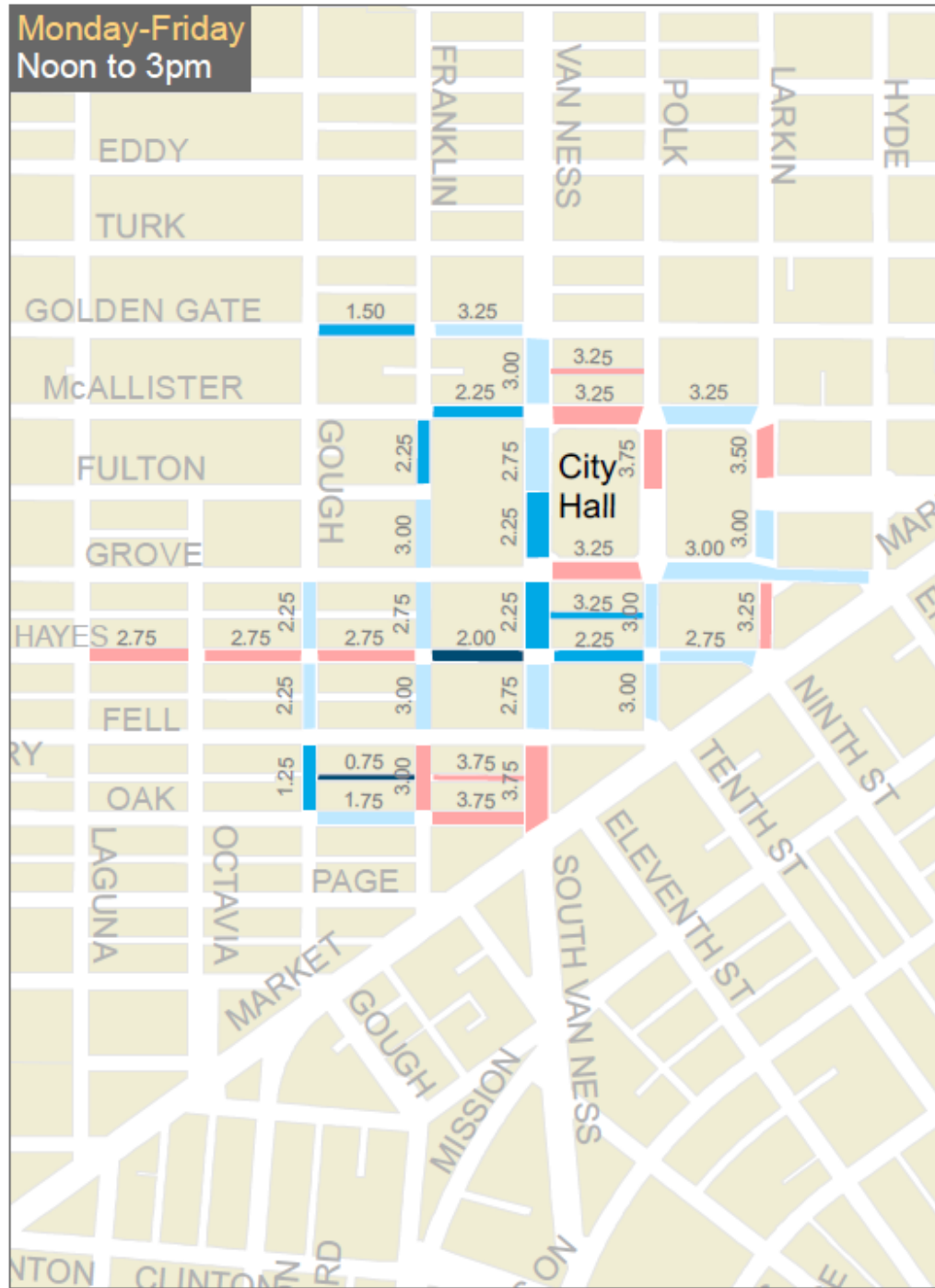
**Block A - Central Business District Location - 1 Open Spot**



**Block B - Nearby Location - 2 Open Spots**



Monday-Friday  
Noon to 3pm



# Civic Center Pilot Area

## Meter Rate Changes December 2011

- +\$0.25
- no change
- \$0.25
- \$0.50



0.25 Mile

## 2. Revenue Return







# 1978 Plan for Old Pasadena

“The area’s been going downhill for years.”

“It’s a bunch of dirty old buildings.”

“It’s filthy.”

“It’s Pasadena’s sick child.”

“The area is unsafe.”

# Old Pasadena Now



# Parking meters with revenue return

- City of Pasadena offered to return all parking meter revenue to Old Pasadena
- Merchants and property owners immediately agreed to install meters
- 690 meters operate until midnight, and on Sunday
- Meters yield \$1.2 million a year for Old Pasadena's 15 blocks, about \$80,000 per block.

**A NEW  
OLD PASADENA  
COMING SOON**

**STREET AND ALLEY WAY IMPROVEMENTS:**

**LIGHTING**

**REPAVING**

**TRASH RECEPTACLES**

**SIGNS AND BENCHES**

**DIRECTORY MAPS**

**TREES AND GRATES**

**NEWSRACKS**

**MAINTENANCE**

**SAFETY**

**YOUR METER MONEY IS  
MAKING A DIFFERENCE**

**THE OLD PASADENA RENAISSANCE CONTINUES**

**CITY OF PASADENA**



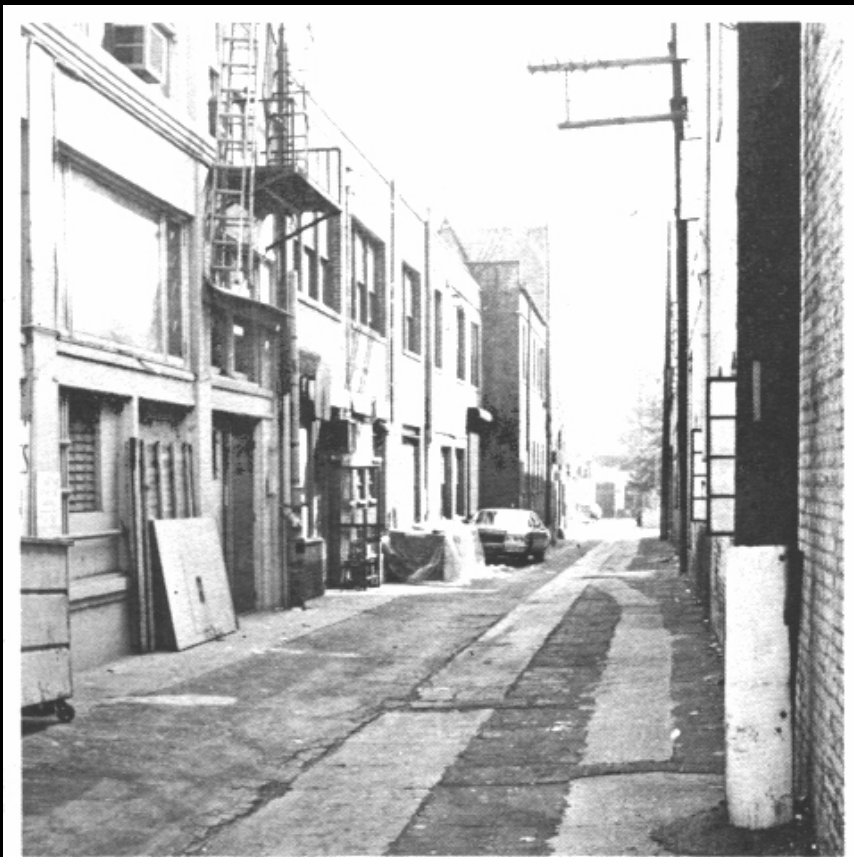
# Turning Small Change into Big Changes







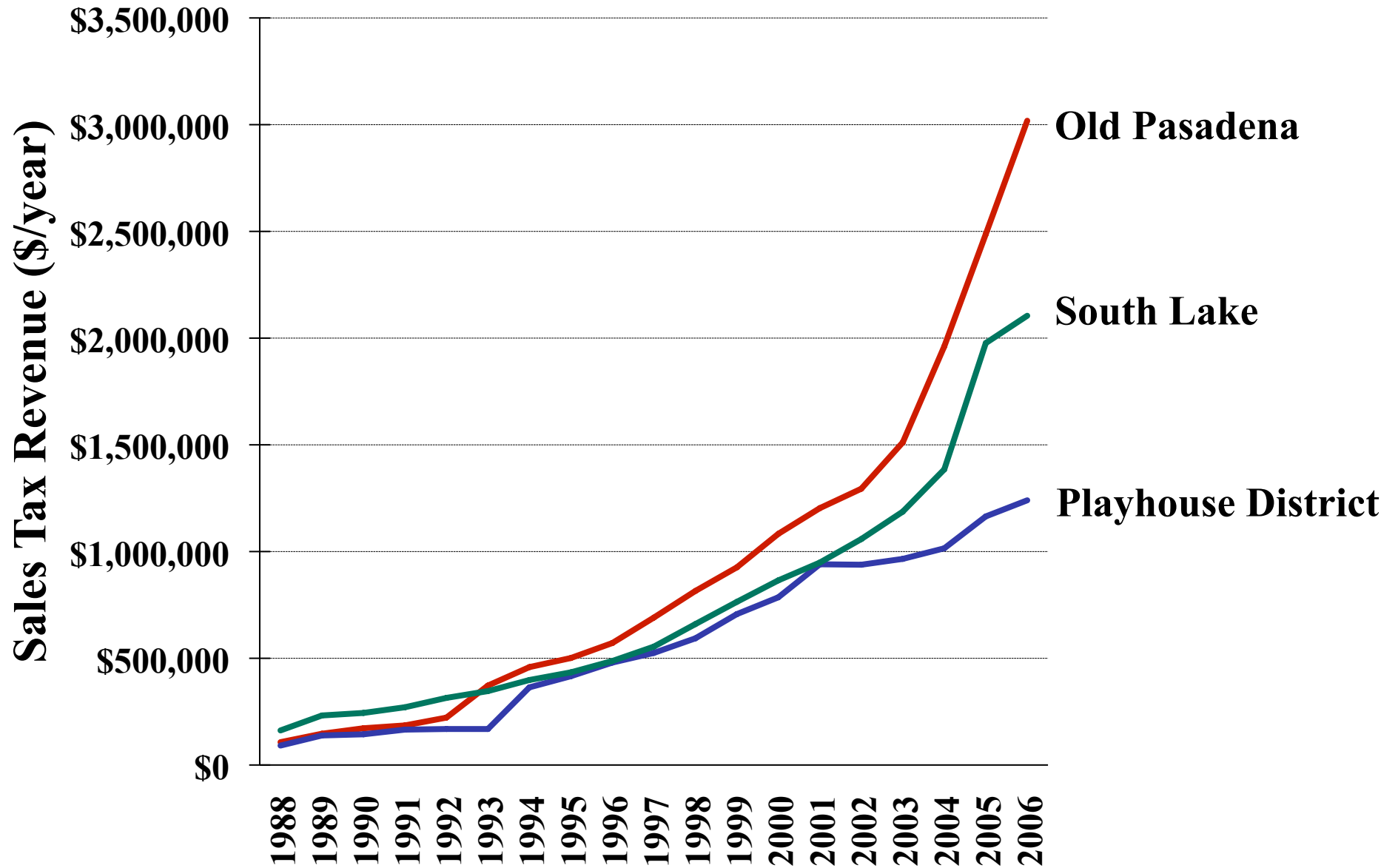








# Pasadena Sales Tax Revenue





### 3. Remove Off-street Parking Requirements

































# Effects of building job-adjacent housing on former parking lots

Increase housing supply

Reduce time spent commuting

Reduce spending on cars and fuel

Reduce traffic congestion and air pollution

Maybe even slow down climate change

# Two Aspects of Parking Requirements

1. For a new building, parking requirements determine the number of spaces a developer must *supply*.
2. For an existing building, parking requirements limit the uses a city will *allow*.



# Los Angeles Adaptive Reuse Ordinance

Until 1999, Los Angeles required two parking spaces per condominium unit in downtown.

“a neighborhood of hoodlums, derelicts and winos—a neighborhood of echoing buildings full of absolutely nothing above the ground floor.” *Los Angeles Times*, 1982

In 1999, Los Angeles adopted its Adaptive Reuse Ordinance (ARO), which allows the conversion of economically distressed or historically significant office buildings into new residential units—with no new parking spaces.

Developers used the ARO to convert historic office buildings into at least 7,300 new housing units between 1999 and 2008.











































Developers provided, on average, only 1.3 spaces per unit, with 0.9 spaces on-site and 0.4 off-site in nearby lots or garages.

Had the ARO not been adopted, the city would have required two *on-site* spaces for every unit, or more than twice as many as developers did provide.





## Other cities are removing parking requirements in downtown

“to promote the creation of downtown apartments” (Greenfield, Massachusetts)

“to see more affordable housing” (Miami)

“to meet the needs of smaller businesses” (Muskegon, Michigan)

“to give business owners more flexibility while creating a vibrant downtown” (Sandpoint, Idaho)

“to prevent ugly, auto-oriented townhouses” (Seattle).



**THIS ONE  
RUNS ON FAT  
AND SAVES YOU MONEY**



**THIS ONE  
RUNS ON MONEY  
AND MAKES YOU FAT**



# If you want to:

Reduce unnecessary vehicle travel

Reduce traffic congestion

Reduce air pollution

Reduce energy waste

Reduce greenhouse gas emissions

Improve neighborhood public services

Increase the supply of housing

And do all this quickly

GET THE PRICE OF CURB PARKING RIGHT

SPEND THE REVENUE FOR LOCAL PUBLIC SERVICES

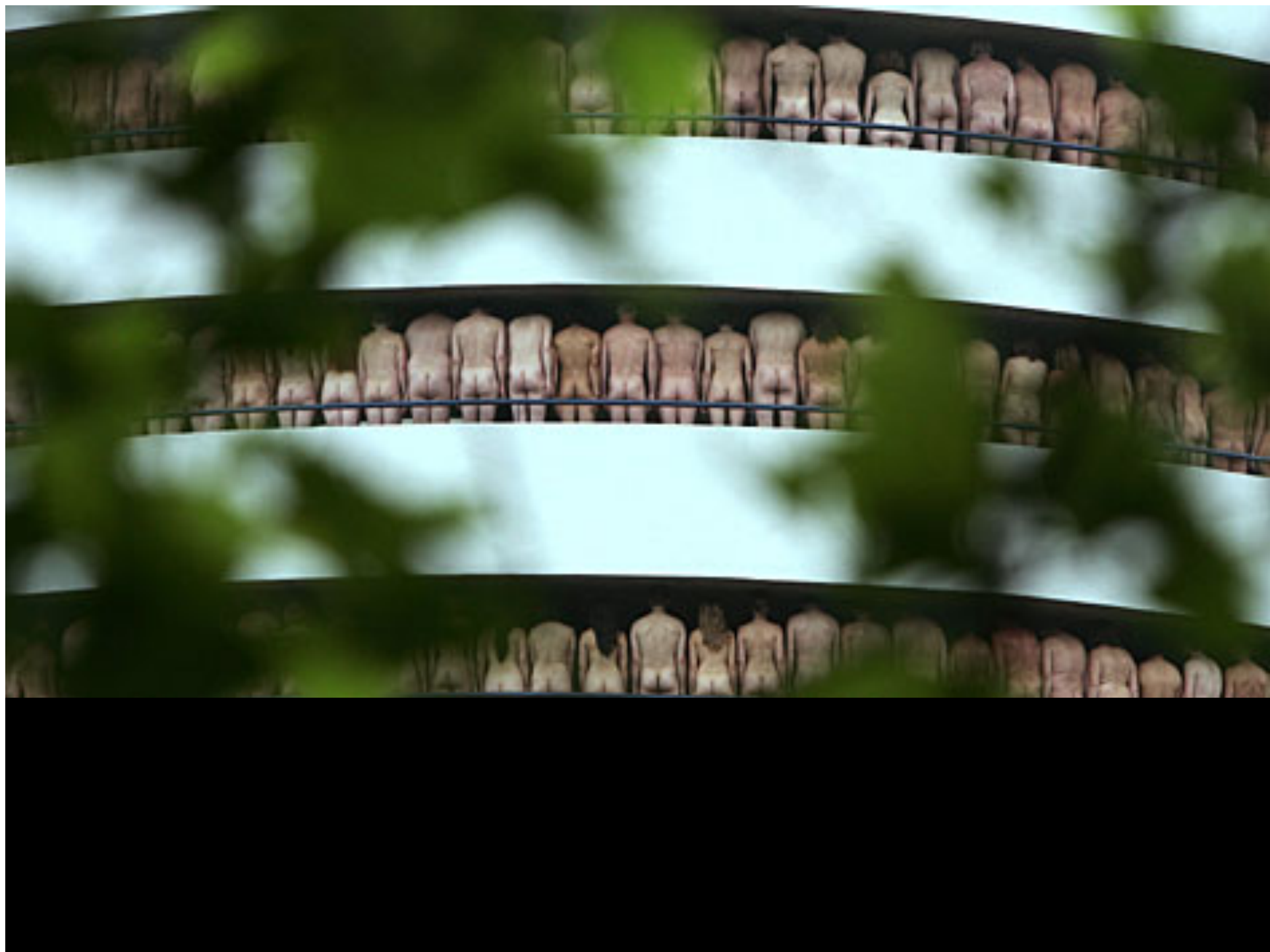
REMOVE OFF-STREET PARKING REQUIREMENTS











All of us, if we are reasonably comfortable, healthy and safe, owe immense debts to the past. There is no way, of course, to repay the past. We can only repay those debts by making gifts to the future.”

Jane Jacobs



As our case is new, so must we think anew,  
and act anew.

Abraham

Lincoln